AMENDMENTS TO THE CLAIMS

1. (Canceled).

2. (Canceled).

3. (Canceled).

4. (Canceled).

5. (Canceled).

6. (**Currently amended**) An automated diagnostic system for use in a computing environment, the system comprising:

a processor configured to implement a plurality of objects which, when executed by the processor, interact to determine a diagnosis of a patient, wherein the objects include at least two of: a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object, each of the objects comprising data and one or more processes that are invoked to access the data, wherein the processes of any one object are not permitted to access the data of another object; and

a digital storage device for storing the plurality of objects and the corresponding data and processes for each object, and wherein the data is encapsulated so that other objects only see the processes of a particular object that can be invoked to access the data.

7. (Original) The system of Claim 6, wherein the objects include a plurality of disease objects and a plurality of symptom objects.

8. (Original) The system of Claim 6, additionally comprising an engine object to coordinate the other objects.

9. (Canceled)

10. (Previously presented)   The system of Claim 6, wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects.

11. (Previously presented)   The system of Claim 6, wherein the objects include a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object.

12. (Previously presented)   The system of Claim 11, wherein the symptom object invokes the valuator object.

13. (Previously presented)   The system of Claim 11, wherein the valuator object invokes the question object.

14. (Previously presented)   The system of Claim 11, wherein the question object invokes the node object.

15. (Withdrawn)   The system of Claim 6, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.

16. (Previously presented)   The system of Claim 6, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.

17. (Previously presented)   The system of Claim 6, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.

18. (Previously presented)   The system of Claim 6, wherein once an object is invoked, the object acts independently of other objects and a particular object retains a record of its actions for future reference.

19. (Canceled).

20. (Previously presented)   The system of Claim 6, wherein a particular disease object monitors the questions and answers of other disease objects.

21. (Previously presented)   The system of Claim 8, wherein the engine object coordinates a plurality of concurrently operating disease objects by switching execution among the disease objects.

22. (Canceled)

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Previously presented)   The system of Claim 6, wherein the disease object directly invokes another disease object.

36. (Withdrawn) The system of Claim 6, wherein the disease object directly invokes the symptom object.

37. (Previously presented) The system of Claim 6, wherein each object has at least constant data.

38. (Previously presented) The system of Claim 6, wherein at least one of the disease object and the symptom object has variable data.

39. (Withdrawn) The system of Claim 7, wherein each disease object is associated with one disease.

40. (Previously presented) The system of Claim 7, wherein each disease object is associated with a phase of one disease.

41. (Withdrawn) The system of Claim 7, wherein each symptom object is associated with one symptom.

42. (Previously presented) The system of Claim 7, wherein each symptom object is associated with a sub-symptom of one symptom.

43. **(Canceled)**

44. **(Currently amended)** An automated diagnostic system for use in a computing environment, the system comprising:

a processor configured to implement a plurality of objects which, when executed by the processor, interact to determine a diagnosis of a patient, wherein the objects include at least two of a disease object, a symptom object, a valuator object, a question object, a node object, and a candidates object, wherein each object has a data structure and one or more associated processes to manipulate data in the data structure, and wherein the processor is configured to access the data of each object only by invoking the processes associated with that object; and

a digital storage device for storing the plurality of objects, ~~wherein the data of each object is encapsulated so that the data is hidden and other objects only see the processes of a particular object that can be invoked to access the data~~.

45.   (Previously presented)   The system of Claim 44, wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects.

46.   (Previously presented)   The system of Claim 44, wherein the objects include a plurality of disease objects and a plurality of symptom objects.

47.   (Previously presented)   The system of Claim 44, wherein the objects include a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object, wherein the symptom object invokes the valuator object.

48.   (Previously presented)   The system of Claim 44, wherein a particular disease is associated with a plurality of disease objects corresponding to different phases of the particular disease.

49.   (Previously presented)   The system of Claim 44, wherein a particular disease is associated with a plurality of disease objects corresponding to different populations for the particular disease.

50.   **(Currently amended)**   An automated diagnostic system for use in a computing environment, the system comprising:

a processor configured to implement a plurality of objects which, when executed by the processor, interact to determine a diagnosis of a patient, wherein the objects include at least two of a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object, wherein each object has a data structure, ~~and~~ wherein each object has one or more functions that belong to the object and that can be accessed from outside of the object, and wherein the data structure of each object cannot be accessed from another object; and

a digital storage device for storing the plurality of objects, ~~wherein data of each object is encapsulated so that the data is hidden and other objects only see the functions of a particular object that can be invoked to access the data~~.

51.   (Previously presented)   The system of Claim 50, wherein the objects are arranged in a hierarchical relationship such that the result of one of the objects is input to another of the objects.

52.   (Previously presented)   The system of Claim 50, wherein the objects include a plurality of disease objects and a plurality of symptom objects.

53.   (Previously presented)   The system of Claim 50, wherein the objects include a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object.

54.   (Previously presented)   The system of Claim 50, wherein a particular disease object is representative of a plurality of related diseases that share common symptoms.

55.   (Previously presented)   The system of Claim 50, wherein the disease object directly invokes another disease object.

56.   (New) The system of Claim 6, wherein the objects include a disease object, and wherein the disease object represents an abnormal health state.

57.   (New) The system of Claim 56, wherein the abnormal health state comprises a complaint or a condition of the patient.

58.   (New) The system of Claim 6, wherein the objects include a symptom object, and wherein the symptom object represents a patient health item.

59.   (New) The system of Claim 58, wherein the patient health item comprises a problem, symptom, manifestation, test result, or observed effect.

60.   (New) The system of Claim 58, wherein, when the symptom object is executed by the processor, the symptom object manipulates data related to the patient's habits or environment.

61.   (New) The system of Claim 58, wherein, when the symptom object is executed by the processor, the symptom object evaluates changes in the severity of the patient health item over time.

62.   (New) The system of Claim 58, wherein the symptom object comprises a code for use in managing a disease identified by the determined diagnosis.

63.   (New) The system of Claim 6, wherein when the objects are executed by the processor, the objects interact to provide advice regarding a treatment for the patient.

64.   (New) The system of Claim 63, wherein the treatment comprises counseling, intervention, rehabilitation, or therapy.

65.   (New) A method of determining a diagnosis of a patient, comprising:
    providing a plurality of objects stored in a memory, the plurality of objects comprising at least two of: a disease object, a symptom object, a valuator object, a question object, a node object and a candidates object, each of the objects comprising data and one or more processes that are invoked to access the data;
    hiding the data of each object from processes outside of the object;
    invoking, via a computer, the processes of a plurality of the objects to determine a diagnosis of a patient.

66.   (New) The method of Claim 65, further comprising arranging the objects in a hierarchical relationship.

67.   (New) The method of Claim 66, further comprising inputting the results of at least one of the objects to another of the objects.

68.   (**New**) The method of Claim 65, wherein the invoking comprises invoking the valuator object with the symptom object.

69.   (**New**) The method of Claim 65, wherein the invoking comprises invoking the question object with the valuator object.

70.   (**New**) The method of Claim 65, wherein the invoking comprises invoking the node object with the question object.

71.   (**New**) The method of Claim 65, wherein objects act independently of other objects and a particular object retains a record of its actions for future reference once invoked.

72.   (**New**) The method of Claim 65, wherein a particular disease object monitors the questions and answers of other disease objects.

73.   (**New**) The method of Claim 65, further comprising providing an engine object.

74.   (**New**) The method of Claim 73, further comprising coordinating a plurality of operating disease objects with the engine object by switching execution among the disease objects.

75.   (**New**) The method of Claim 65, wherein the invoking comprises directly invoking the disease object with another disease object.